

ISO 20022: Exploring the impact of a new data structure on the payments ecosystem

The path to seamless exchange of financial transaction data

ISO 20022 enables the seamless exchange of financial transaction data through a standardized messaging schema that introduces a more robust data structure. The payments industry increasingly recognizes the long-term benefits and growing urgency of adopting the new standard – and many corporations and financial institutions are planning for the transition. This whitepaper explores the impact of using a new message type, illustrates the XML schema, reviews the current outlook for adoption, details potential pain points, and provides perspectives on moving forward. Wherever a company is in their adoption journey, it is important to design an implementation strategy that aligns to their unique business goals and objectives.

Why is seamless exchange of data so important?

Now more than ever, businesses rely on the seamless processing and transfer of financial data. Whether it's to complete a purchase transaction or to transfer money internationally, data transfer is a bedrock of the payments ecosystem. As a result, the launch of ISO 20022 is a significant development for the industry. Financial institutions and businesses are gearing up to accommodate the new data standard.

The evolution to a new standard

ISO 20022 is a strategic industry initiative to replace proprietary messaging formats with a standard format and well-defined data elements. This open standard will help improve payment processing efficiency and promote interoperability among payment systems around the world. Moving from MT to MX message types will help eliminate many pain points and facilitate more positive outcomes.



FIN Message Types (MT)

- **MT messages** have a limited set of fields and number of characters.

Over time, **MT messages** have been customized to accommodate local practices, leading to variability.



FIN+ Message Types (MX)

- **MX messages** have a broader payments message data structure, allowing for the remittance of additional data points.
- A common business and data dictionary unifies fragmented standards.

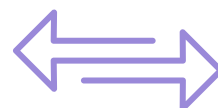
Limitations

- Processing delays/errors
- Lack of transparency
- Inability to reconcile payment information

Benefits

- Faster straight-through payment processing
- Greater predictability & automation
- Fewer false positives during sanctions screening
- More efficient reconciliation

Legacy SWIFT FIN message types (MT) were as data light as possible to accommodate for human consumption when sophisticated data capabilities were not yet available. This resulted in high cost transactions that were error prone. **FIN+ message types (MX)** offer a much broader structure that maximizes advanced technology processing capabilities, enabling greater data harmonization and granularity.



Current: Short-term data fixes create long-term reconciliation issues

MT message types have been ubiquitous and served many functions well. But over time, organizations began customizing MT messages on a case-by-case basis to accommodate local practices and their variants.* Outside of industry-wide governance, these modifications led to significant variability in message and data usage. As a downstream effect, there has been a negative long-term impact on the seamless exchange of data among institutions. Further, data that is exchanged using MT message types often results in processing delays and errors, lack of transparency, increased investigations, and difficult payment reconciliation due to the MT messages limited structure and data content.



Post conversion: A common data dictionary helps ensure ongoing interoperability



Post ISO 20022 implementation, **MX message types** will provide a new data structure along with a centralized data dictionary developed and vetted by experts across a wide range of financial business domains. ISO 20022 has a defined and governed process for the submission of new message definitions. This due diligence ensures a sustainable approach to data harmonization as financial transactions evolve over time. The MX data type, coupled with a more unified approach to managing financial data, results in several benefits. These include faster, straight-through processing, added predictability and automation, a likely reduction of false positives during sanctions screening, and more efficient reconciliation.

The ISO 20022 framework eliminates fragmented standards by accommodating local variants through a governed submission process.

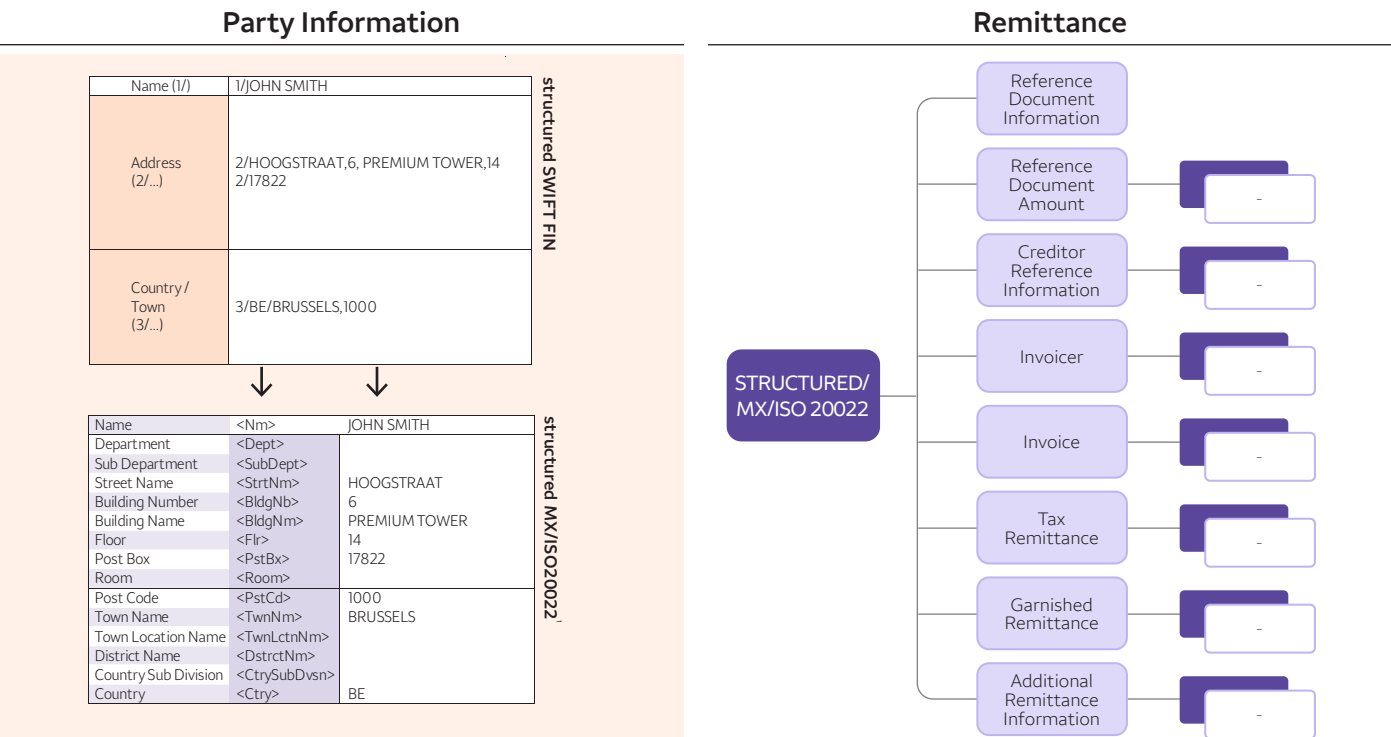


*A variant is a simplified or enhanced version of a message.

Seamless transactions with the ISO 20022 framework

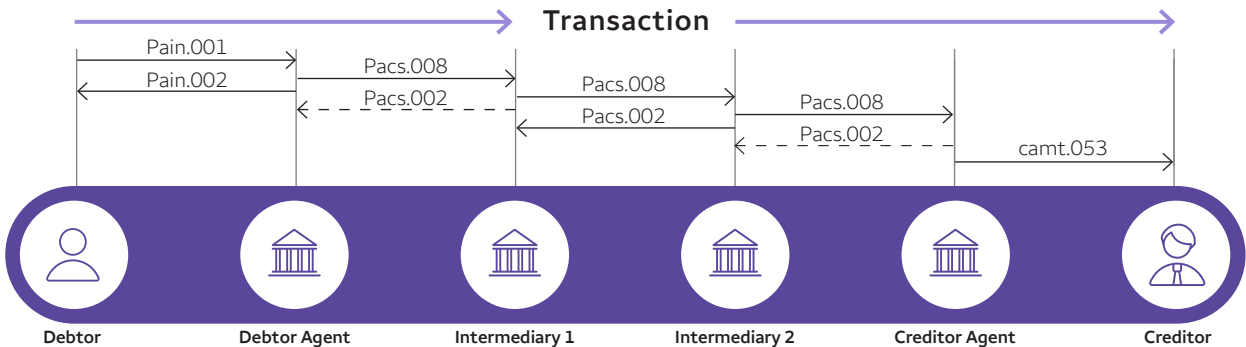
The Value of Structured FIN+ Message Types (MX)

MT messages combine data as a continuous line of text, potentially truncating important information. In comparison, **MX messages** have their own unique fields. These fields create the opportunity to increase the number of data points that can be sent and received, in a standardized and structured way, allowing remittance information to travel in the payments message itself.



Tracking MX payment data end-to-end

ISO 20022 allows field data (e.g., Identification, Unique End-to-end Transaction Reference (UETR), and Remittance) to seamlessly travel across the whole payment, from payment initiation to statement and advising messages.



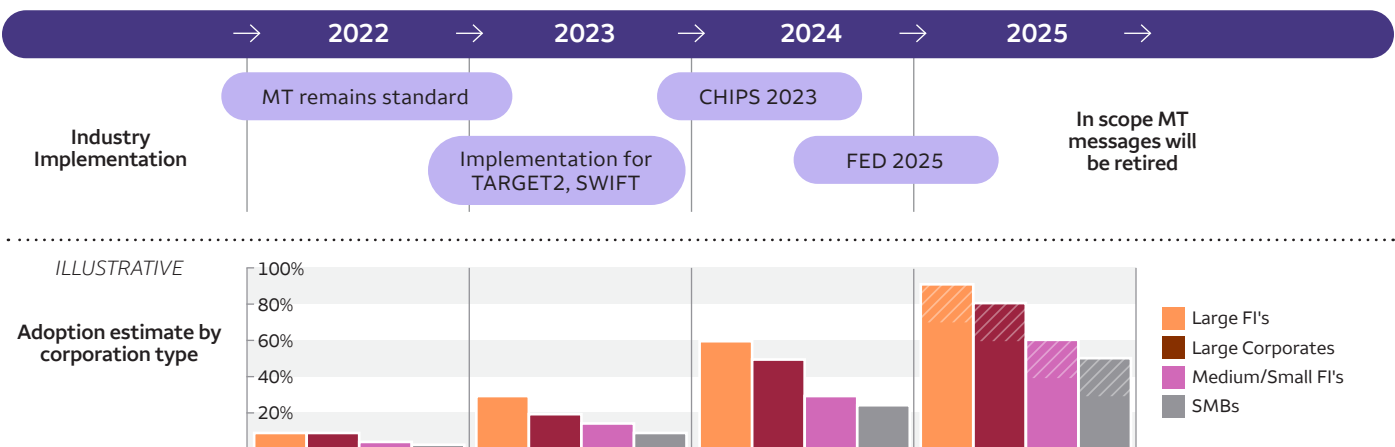
Industry participants on the path to adoption by 2025

As a forerunner of wider adoption, **interbank payments and messaging platforms** like TARGET2, SWIFT, CHIPS, and The U.S. Federal Reserve are adopting the standard along a timeline that gives companies ample time for planning a smooth transition to ISO 20022.

Some larger financial institutions and corporations are planning targeted adoption in close alignment with industry guidelines. Other businesses are taking a conservative approach dependent on their resources, ability to navigate new technology requirements, and the likelihood of a potential business disruption.



Each organization has unique requirements for transitioning, depending on their industry and size. Therefore, a period of interoperability will take place, resulting in compatibility between the old and new payment message structure.



Some larger FIs and corporations are planning targeted adoption in close alignment with industry guidelines. Smaller FIs and medium/small businesses may be slower to adopt, and many may not achieve adoption within four years.

Regardless of the approach or timeline each organization follows, there are tools, third party solutions, and FI support to ease the challenge of transitioning to ISO 20022. Some organizations are well down the road of conversion, but others have yet to explore the new data structure and put plans in place for adoption. Ultimately, wherever a company is in their adoption journey, a strategy should be created to implement the new data structure in alignment with their business goals and objectives.



Challenges and considerations when converting to ISO 20022



Identify and prepare resources

Shifting to the ISO 20022 message format will have unique challenges for banks, their clients, suppliers, and partners. Some companies will not be ready to transition by the recommended industry deadline. Others will forgo ISO 20022 migration altogether because of costliness or lack of resources and will require ongoing help of third parties. For both banks and businesses, upskilling may be a concern, as there may not be enough ISO 20022 expertise to satisfy the demands of broad adoption. These factors could lead to a disconnect with corporate customers who are each at various stages of understanding and motivation to adopt.



Budget for an increase in cost

Substantial upfront investment may be required to modernize legacy platforms and update systems enterprise wide. Other costs may include investments in ISO 20022 education and enablement.

Additionally, during a time of interoperability between legacy MT messages and MX messages, there may be expenses associated with the translation of both MT and MX message types. Translation and gateway options may incur upfront costs, whether using custom in-house solutions or third-party vendors.



Invest in the technology

Legacy systems may be unable to meet the demands of ISO 20022. However, scaling technology to prepare for adoption is complex and, in some cases, controversial. Not all parties may agree on the benefit or timing of right-sizing technology to accommodate the migration.

Technology issues may result in delays and complications during the adoption journey, causing a negative ripple effect across all segments and lines of business. In cases where organizations choose to mitigate risk by planning a bare minimum implementation, some ISO 20022 benefits, such as comprehensive data insights, may not be fully realized.

Enabling the transition – strategies for moving forward with the new ISO 20022 data standard

While there are challenges in adopting ISO 20022, there are strategies companies can implement to ease the transition and mitigate the risks.

Education and engagement will be crucial, as banks and their customers move toward adoption

To ensure a successful transition, many institutions and businesses will require committed employees who have a comprehensive understanding of ISO 20022. Given the level of uncertainty some customers may feel moving forward, banks may want to take a proactive step to engage their customers in educational campaigns. Equally, employees must also be educated and informed.



Maximize the benefits of richer data to help offset the upfront costs of adoption and ease potential customer pain points

There are clear upfront costs that may discourage prompt adoption. However, because of the compliance-driven nature of ISO 20022, organizations can make a strong business case for the new standard as part of the larger data strategy and product roadmap.

ISO 20022 renders data more usable – fit for enabling automation and mining insights that may have otherwise gotten lost in translation. In turn, richer data can remediate transaction pain points like slow reconciliation or false positives during sanctions screening. Identifying and addressing these pain points can improve reliability and consistency for customers.

Question:

“What benefits do you expect to realise from your ISO 20022 upgrade?”

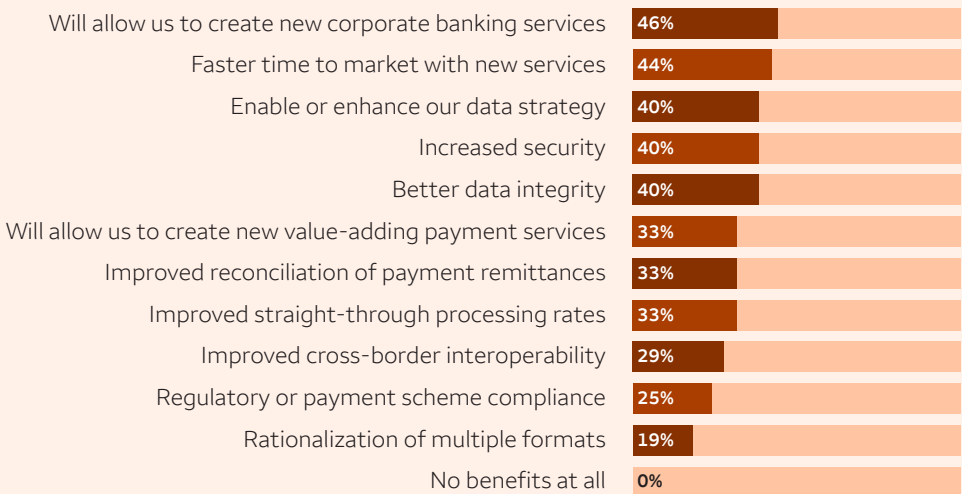


Figure 4- Celent Payments Data Monetization Survey, 2021²

Position ISO 20022 as part of a broader payments modernization strategy

One of the most daunting aspects of ISO 20022 can be the technology conversion. Taking a long-term perspective can ease the hesitance some organizations may feel at the brink of a potentially disruptive infrastructure transformation. Carefully forming a recommendation for modernization and phased sun-setting of certain technology is a way to mitigate risk and instill confidence in the path forward. Strategically, ISO 20022 migration can serve as the impetus for improving corporate banking services that also require upgraded infrastructure to meet expanding industry demands.



For example, many banks are focused on building a robust library of internal and external APIs to satisfy the demand for open banking products and services. This may allow for the development and management of ISO 20022 related APIs to be considered at the front end of migration in parallel with the broader API strategy.

Benefits of converting to the new data structure

Although employees and customers may not initially understand the urgency of adoption — banks can expect clear benefits, including:

- an improved client experience and value-added solutions that drive improvements in end-to-end processing
- lowered costs by reducing exceptions
- improved risk management and sanctions processes



This is not only a movement from one messaging standard to the next, but a shift in data models and a new payments language for machines and humans. Financial institutions can lead the way in reminding customers about the importance of ISO 20022 adoption.

Conclusion

The seamless transfer of data is essential to both domestic and international commerce and financial markets. Not surprisingly, many banks are now starting to recognize that adopting ISO 20022 could help drive their wider payments transformation and modernization journeys. Good planning along with modernization and collaboration will ensure a smooth transition and pave the way for an even more frictionless payment experience in the years to come.

Payments – the pulse of global economic growth

Payments innovation has gone into hyperdrive. The past five years have seen more innovation in payments than the previous 50 years combined. The pace of innovation is accelerating, and it is sweeping along government entities, businesses, and consumers. As a result, payers have more options than ever before.

The ascent of payments has included the main drivers of the global economy. No segment of the population has been left behind. Retailers offer their own payment tools, cross-border payments reach beneficiaries in almost any country, local businesses have contactless digital checkouts, government entities are launching digital cash, and everyday consumers regularly use buy now, pay later products. Even unbanked and underbanked consumers are being empowered with new options to send and receive money. These innovations did not exist – at least not at scale – as recently as five years ago.

Even as the payments ecosystem is driven by technology advancements and machine-driven insights, our main focus remains the very real impact these innovations have on the customer. The end customer is, and must always be, at the center of payments innovation. Solutions that are straightforward and seamless are the ones that will win in the coming years.



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Sources:

1. Payments Market Practice Group (PMPG). Structured ordering and beneficiary customer data in payments.
2. Celent. The Payments Data Monetization Opportunity in North America (2021).

Wells Fargo Perceptions paper has been developed in partnership with the U.S. Faster Payments Council (FPC). The FPC is an industry-led membership organization whose vision is a world-class payment system where Americans can safely and securely pay anyone, anywhere, at any time and with near-immediate funds availability. The FPC uses collaborative, problem-solving approaches to resolve the issues that are inhibiting broad faster payments adoption in this country.

For more information, please visit FasterPaymentsCouncil.org.



Payment Perceptions

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